

BOOK REVIEWS

DENNIS W. SCHLICHT, JOHN A. DOWNEY, and JEFFREY A. NIKOLA. 2007. **The Butterflies of Iowa**. (ISBN 1-59829-533-4, pbk.). University of Iowa Press, 100 Kuhl House, Iowa City, IA 52242, U.S.A. (**Orders:** <http://www.uiopress.uiowa.edu/>). \$29.95, 233 pp., color photographs, 7" × 10".

By definition as well as size, this book is not intended as a field guide but rather as a manual to accompany comprehensive guides used in identifying and studying the butterflies of Iowa. Through the maps it is also a finding guide. Essential information is provided for each species: status (breeding or otherwise), flight period, description, and habitat. Under the heading Natural History the authors note the larval host plants (though often not specifically), larval and imago (adult form) behavior and other pertinent and interesting facts. A most innovative feature is the "Questions" rubric, questions about each species, which indicate how much there is yet to learn about butterflies in general and the potential research that even an amateur lepidopterist could undertake through careful observation and study.

Since the photographic plates are of pinned specimens, they lack brilliance. However, the views of dorsal and ventral surfaces of male and female (sexually dimorphic species) will facilitate identification.

A well-executed study of the subject, this book should be helpful and stimulating to all levels of butterfly watchers and collectors in Iowa and neighboring states.—*Joann Karges, (TCU Library, retired), Botanical Research Institute of Texas, Fort Worth, TX, 76102-4060, U.S.A.*

JONATHAN SILVERTON. 2005. **Demons in Eden: The Paradox of Plant Diversity**. (ISBN 0-226-75771-4, hbk.). University of Chicago Press, 1427 East 60th Street, Chicago, IL 60637-2954, U.S.A. (**Orders:** www.press.uchicago.edu, 773-702-9756 fax). \$25.00, 169 pp., 8 color plates, 5½" × 8½".

In this book the author, a professor and researcher at the Open University, Milton Keynes, asks and answers some important and intriguing questions regarding alien, invasive plants and their past and future potential for the development of new species. He poses a fundamental question "how to reconcile the evolution of diversity with the fact that natural selection favors individuals with demon traits and dominating proclivities." (p.34)

He then takes the reader around the world to illustrate demon plants which he has studied intensely. With a first stop to show the extraordinary diversity in the plants of the Kew Gardens he proceeds to the Kew Laboratories where major molecular work is establishing a new evolutionary tree of knowledge. This Darwinian tree is the metaphor the reader follows in the book, as the author leads us to the Canary Islands, to the chalk grass lands of England, to Mount Shimagare of Japan with its demon bamboo (*Sasa*) and the fir forests there and in the Adirondacks, to southern Mexico, to Barro Colorado, to Guanacaste, to the Florida Everglades.

In these areas the author discusses the evolution of plants, the colonizing tendencies of naturally or intentionally introduced aliens, the importance of niches and gaps, soils and other environmental conditions, the costs of reproduction in some plants (the bloom-and-die syndrome), competition among similar species, dispersal limitations, and transplanted ecosystems. An important chapter ("New Demons?") concerns the development and use of transgenic crops, the realized and potential effects.

While the situation for biodiversity seems dire (the most dangerous demon is actually mankind), the author presents the restoration of parts of Guanacaste as "good news," which should of course be emulated, and conservation efforts should expand around the globe.

Thoroughly scientific, stimulating, and provocative, the book offers significant insights into invasive plants (alien or endemic) and biodiversity. Chapter notes include bibliography and suggestions for further reading.—*Joann Karges, (TCU Library, retired), Botanical Research Institute of Texas, Fort Worth, TX, 76102-4060, U.S.A.*